

ABSTRACT

The object of this invention is to provide a blown film which even if it is thin, is strong, feels firm and has high transparency and this invention provides a blown film comprising a multi-layer film of 3 or more layers comprising surface layers made of linear low-density polyethylene 1 satisfying the following requirements (A) to (C) and middle layers, wherein at least one of the middle layers is a layer comprising a resin composition comprising low-density polyethylene and linear low-density polyethylene 2 having a crystallization temperature higher by at least 2°C than the crystallization temperature of the linear low-density polyethylene 1, as well as a blown film having a haze value of 7 % or less, a tear strength of at least 110 kN/m in the MD direction, and a 1 % secant modulus (1 % SM) of at least 190 MPa.

(A): a composition distribution variation coefficient (C_x) represented by the following equation (1) is not more than 0.5,

$$C_x = \sigma / SCBav \quad (1)$$

wherein σ is a standard deviation of composition distribution, and $SCBav$ is an average branching degree,

(B): a content (a) of cold xylene-soluble portion in terms of % by weight based on the weight of the linear low-density polyethylene 1 and the density (d) satisfy the following inequality (2),

$$a < 4.8 \times 10^{-5} \times (950 \cdot d)^3 + 10^{-6} \times (950 \cdot d)^4 + 1 \quad (2)$$

(C): a crystallization temperature (T_c) and a density (d) satisfy the following inequality (3),

$$T_c > 0.763 \times d - 599.2 \quad (3)$$